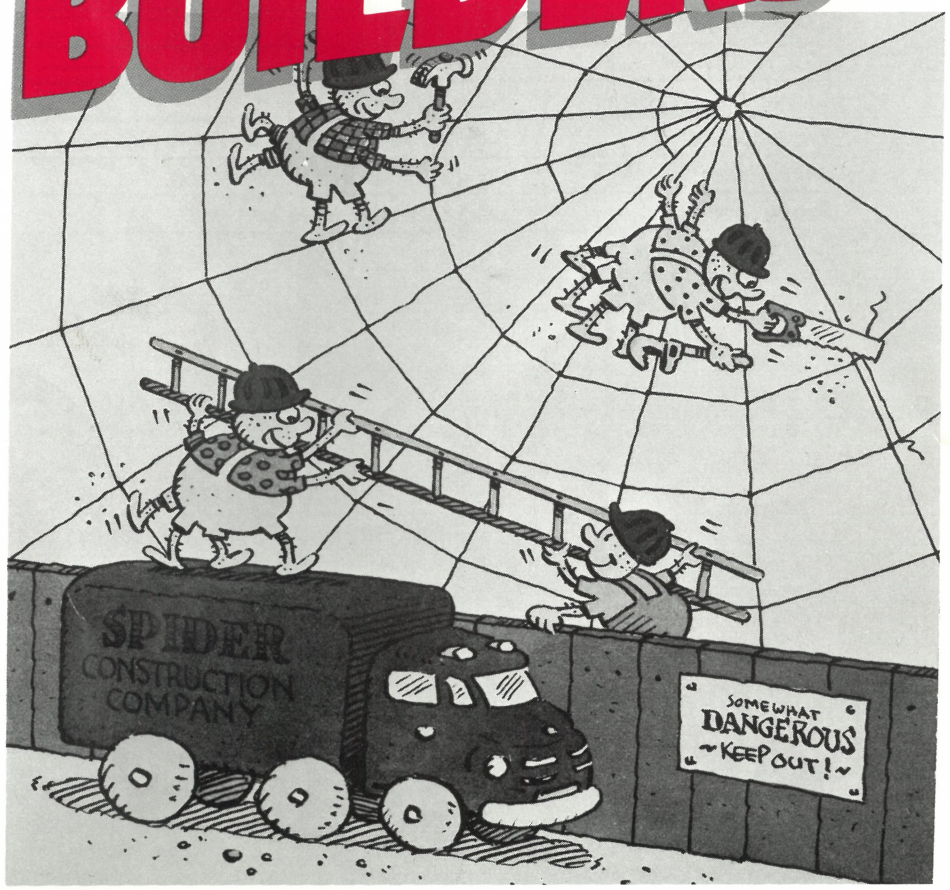
LOGIC BUILDERS™



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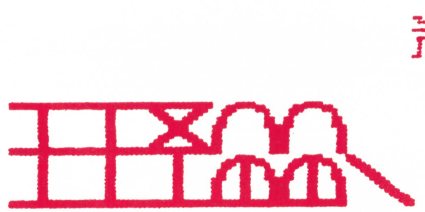
INTRODUCTION

In *Logic Builders,* you team up with a construction crew of five friendly spiders. Working with the spiders, you must build webs that match the designs drawn by the Big Boss of Logic Builders, Inc. For jobs well done, you'll receive points from the Big Boss — and a special spider surprise.

As any spider can tell you, there's more than one way to build a web. Your job is to figure out the best way. Should you build the web one shape at a time, putting all of the triangle pieces down first, then all of the *S* shapes, and so on? Or should you build row by row, starting at one end of the web and working toward the other? In any case, the best way is the one that uses the fewest number of moves, or the least amount of time.

As leader of the construction crew, you'll have some important decisions to make before you begin building. You'll have to choose from three types of spiders: simple, tricky, or extra tricky. You'll also have to select from three types of webs: simple, medium, or complex. The trickier the spider and the more complex the web, the more points you can earn from the Big Boss.

By completing a number of web jobs, you can collect enough points to earn a promotion. But plan your webs carefully — earning a promotion won't be easy, and each job's not finished until your web matches the master design exactly.



GETTING STARTED

Loading Logic Builders Into Your Computer

To load *Logic Builders* into your computer, see the instructions on the reference card included in your *Logic Builders* package.

Choosing a Game

Logic Builders includes three different web building games: DRAW A WEB, MATCH A WEB, and RECALL A WEB. Once you load *Logic Builders* into your computer, the main menu will display these three game choices. To select a game, follow the directions at the bottom of the menu screen.

In DRAW A WEB, you are the web designer. Create any kind of web pattern that you want — it's up to you and the spiders. When you finish, you can save your design. Later, challenge your friends a match it in the other two *Logic Builders* games: MATCH A WEB and RECALL A WEB.

In MATCH A WEB, a master web design appears on the right side of the screen. You must direct the spiders on the left side to build an exact copy of the master web. The fewer moves you take, the higher your score will be.

Like MATCH A WEB, RECALL A WEB challenges you to build a perfect copy of a master web. But there's one big difference. In RECALL A WEB, the master web disappears as soon as you start building! Racing against the clock, you must create the matching web from memory. Peeks are allowed, but they take up precious time. The faster you complete the job, the more points you earn.

For instructions on playing the three games, see the sections that follow, the *Logic Builders* reference card, and the computer demonstration of each game.

PLAYING DRAW A WEB

In DRAW A WEB, you and the spiders team up to draw fancy web designs. Draw a web just for fun, or save it to use in the two other *Logic Builders* games.

The Game Menu

After you have selected DRAW A WEB from the main menu, you will see the game menu. The menu for DRAW A WEB includes the following choices:

DRAW
DEMONSTRATION
PICK SHAPES
CONTROL: KEYBOARD
SOUND: ON
RETURN TO MAIN MENU

Draw

When you are ready to begin making a web, select DRAW. You will see the *Logic Builders* game screen and the doors for five different spider houses. Each spider will draw the shape shown on its door. Follow the directions at the bottom of the screen to choose a spider. When you do, the spider will come out, ready to go to work for you. For more information on how to draw with the spiders, see the reference card.

Demonstration

If you are playing for the first time, select DEMONSTRATION to learn how to move the spiders and draw webs.

Pick Shapes

Once you select PICK SHAPES, you'll see an assortment of 35 web pieces. By following the instructions on the bottom of the screen, you can choose five different shapes to draw with at any one time. As you draw, you can overlap the shapes to build even more interesting designs and some fancy web-work.

Control

Use this item to change the CONTROL setting. The CONTROL settings are: keyboard, joystick, or mouse (available only on the Apple® version of *Logic Builders*). Do not change the setting to joystick or mouse unless you have a joystick or mouse plugged into your computer.

Sound

Select this item to turn the sound on or off at the beginning of any *Logic Builders* game.

Return to Main Menu

When you are finished with a web, you can select this option to return to the main menu. From there, you can choose to play either of the other two *Logic Builders* games.

Erasing with the Broom

As you draw webs, don't be afraid to experiment. If you draw a shape you don't like, you can always use the broom to erase it. To erase with the broom, select the broom-closet door. When the broom appears, move it on top of the web piece you want to erase. Then follow the directions on the bottom of the screen to sweep the web piece away.

Finishing and Saving Your Webs

When you are finished drawing a web, select the EXIT door. The computer will ask you if you'd like to save your web. If you answer Y (yes), the computer will tell you to give your web a number from one to 20. Once you do, *Logic Builders* will save the web on your disk. As long as you remember the web number, you can retrieve the web later for use as the master web in MATCH A WEB or RECALL A WEB.

PLAYING MATCH A WEB

In MATCH A WEB, a master web appears on the right side of the screen. Your challenge is to draw an exact copy of the master web on the left side of the screen. The fewer moves you take to match the web, the more points you'll earn.

Game Menu

Once you choose MATCH A WEB from the main menu, the game menu will appear.

The game menu for MATCH A WEB includes the following options:

PLAY GAME
DEMONSTRATION
WEB TYPE: SIMPLE
SPIDER TYPE: SIMPLE
CONTROL: KEYBOARD
SOUND: ON
RETURN TO MAIN MENU

Play Game

Once you've selected the web and spider type, you are ready to select PLAY GAME. When you do, the computer will display the game screen, and you'll be ready to play MATCH A WEB.

Demonstration

The demonstration will show you how to play MATCH A WEB. It will also give you some practice moving the spiders and drawing web pieces in the correct places.

Web Type

You can choose from four different types of webs: simple, medium, complex, and "yours" (webs created and stored by you in the DRAW A WEB game).

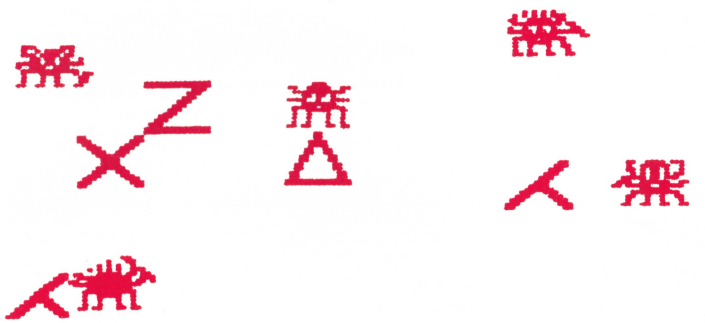
The web collection can include up to 80 webs at any one time.

Numbers one through 20 are reserved for storing your own webs. To select a master web from your own collection, set the web type to YOURS. The computer will ask for a web number. When it does, simply type in the number of the web you want.

Spider Type

You can employ three different types of spiders: simple, tricky, and extra tricky. Simple spiders are very easy to work with. They draw only one web piece at a time, and they have no surprises in store for you. Tricky spiders are a little more difficult. While some build one web piece at a time, others draw two or three at a time.

Extra-tricky spiders are even harder to figure out. Each builds web pieces according to its own pattern. For example, one extra-tricky spider might draw a single web piece the first time you use it, three pieces the second time, and two pieces the third time. Its pattern would be 1-3-2-1-3-2. A second extra-tricky spider might have a 3-3-2-3-3-2 pattern, a third might have a 1-2-1-1-2-1 pattern, and so on. On any single web job, each of the five extra-tricky spiders will have a different pattern.



Control
Use this item to change the CONTROL setting. The CONTROL settings are: keyboard, joystick, or mouse. Do not change the setting to joystick or mouse unless you have a joystick or mouse plugged into your computer.

Sound
Select this item to turn the sound on or off in the MATCH A WEB game.

Return To Main Menu
This option allows you to return to the main menu. From there, you can choose to play either of the two other *Logic Builders* games.

Finishing a Web
When you complete a web, choose the EXIT door on the MATCH A WEB screen. If you've matched the master design exactly, your final score will appear in the upper right-hand corner of the screen. If your web needs more work, the Big Boss will let you know.

Scoring Points in Match a Web
In MATCH A WEB, your score is partly determined by the number of moves that you take to build a matching web. You can take up to 999 moves to build a web, but the fewer moves you take, the better. Each time you draw a web piece, you use up one move. Each time you use the broom to sweep away a mistake, you use up two moves. A counter at the top right of the screen in MATCH A WEB keeps track of the number of moves that you take.

Your score also depends on the type of spider and level of web you have chosen. The more tricky the spider and the more complex the web, the more points you can earn. If you earn enough points, the Big Boss will reward your good work with a promotion!

PLAYING RECALL A WEB
RECALL A WEB is like MATCH A WEB, but with a few extra twists. In RECALL A WEB, the master web design disappears as soon as you start to copy it. Working from memory, you race against the clock to build a matching web. You can peek at the hidden design, but each peek will cost you time and points.

Game Menu
Once you choose RECALL A WEB from the main menu, the game menu will appear on the screen (see below). The RECALL A WEB game menu includes the same items as the MATCH A WEB menu. For complete explanations of each item, see the descriptions under PLAYING MATCH A WEB (see page 8).

PLAY GAME
DEMONSTRATION
WEB TYPE: SIMPLE
SPIDER TYPE: SIMPLE
CONTROL: KEYBOARD
SOUND: ON
RETURN TO MAIN MENU

Play Game
Once you have set the web type and spider type (see page 9), you are ready to select PLAY GAME. When you do, the computer will display the game screen, and you'll be ready to play RECALL A WEB.

Demonstration
If you are playing RECALL A WEB for the first time, you'll want to select the DEMONSTRATION. Go through the demonstration to practice building a web from memory, and to learn how to peek at the hidden master web.

Web Type
Choose this item to set the WEB TYPE to simple, medium, complex, or "yours" (webs that you created and stored in DRAW A WEB).

Spider Type
Choose this item to set the spider type to simple, tricky, or extra tricky.

Control
Use this item to change the CONTROL setting. Do not change the setting to joystick or mouse unless you have a joystick or mouse plugged into your computer.

Sound
Select this item to turn the sound on or off at the beginning of any *Logic Builders* game.

Return to Main Menu
Choose this item to return to the main menu. From there, you can select either of the two other *Logic Builders* games.

Finishing a Web
When you complete a web, select the EXIT door on the RECALL A WEB game screen. If you've built an exact match for the master web, your final score will appear in the upper-right corner of the screen. If your web needs more work, the Big Boss will let you know.

Scoring Points in Recall a Web
In RECALL A WEB, your score is partly determined by the amount of time it takes you to build a matching web. As you'll see, the clock in the upper-right corner of the screen moves very quickly. That's because it keeps track of spider time, not human time. But don't worry about running out of time before you finish the web. The *Logic Builders* clock runs all the way to 59:59.

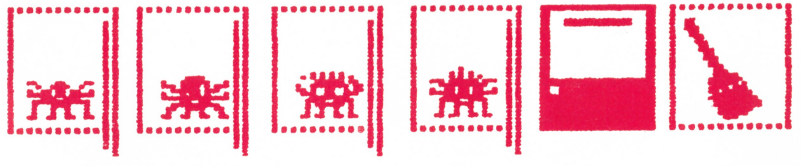
Your score also depends on the number of peeks you take. The fewer times you peek at the master web, the better. Sometimes it's better to peek and build your web correctly early on than to waste time erasing incorrect web pieces.

Of course, the number of points you can earn on a RECALL A WEB job also depends on the type of spider and level of web you have chosen. As in MATCH A WEB, you can earn the most points if you choose extra-tricky spiders to build a complex web.

GETTING PROMOTED
When you and your spider crew build a perfect web in MATCH A WEB and RECALL A WEB, you will be rewarded for your efforts. The points that you earn for each web job all contribute to your total score — the number displayed each time you complete a web. The Big Boss, an experienced web worker himself, is always on the look out for new talent. Earn enough points, and he will give you a series of promotions. After each promotion, you will also see a spider surprise. With practice, you may even earn the title of Big Boss — a great achievement in web-building circles everywhere.

The different job levels, along with the number of points you need to be promoted to each level, are listed below:

Level	Total Points Needed
SUPERVISOR	10 POINTS
MANAGER	50 POINTS
DIRECTOR	100 POINTS
BOSS	200 POINTS
BIG BOSS	500 POINTS



TIPS FOR WEB BUILDING

Web Location

As long as you've built a perfect duplicate web on the left-hand side of the screen, you don't have to worry about its exact placement on the screen. You can build it a few rows above or below the position of the master web, or a few columns to the left or the right. Just be sure that the web itself is an exact match.

Placing Web Pieces With Tricky or Extra-Tricky Spiders

If you are placing a web piece at the bottom of the screen, you'll have to pay close attention to each spider's drawing habits. For example, if a spider is set to draw three shapes at once and you position it two rows above the bottom of the screen, it won't be able to draw at all! You'll have to move the spider up to the third row, so it is able to drop all three web pieces. You can use the broom to sweep away any extra pieces that you don't need.

Figuring Out the Extra-Tricky Spiders

One way to figure out the patterns of the extra-tricky spiders is to move each spider across the screen, drawing web pieces as you go. By doing this, you'll be able to see the number of web pieces the spider draws each time. Unfortunately, you'll also have a lot of erasing to do, and each time you erase counts as a double move.

Another option, if you have the sound on, is to listen to each spider's pattern. The spider makes a sound as it draws each web piece. You can test all of the spiders' drawing patterns in the same spot on the screen, and call the spot the "test pile." Don't worry about being able to see each web piece. As long as you LISTEN to the number of beeps made by a drawing spider, you can figure out its pattern. Once you know the spiders' patterns, you can erase the "test pile" with a small number of broom sweeps.

Detailed Web Work

Sometimes, you'll build a web that looks like a perfect match, but the Big Boss will say that you have more web work to do. When this happens, you'll have to look carefully at each piece in your web to locate the problem. As you check your web, pay special attention to the thickness of each line. If one of the lines in your web looks slightly thicker or thinner than a line in the master web, you'll have to erase that line and try to rebuild it using a different combination of shapes.

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